

# **AMP-FL82xx-SB**

**S-band**

**Optical Fiber Amplifier**

**Specifications**



2-1-15 Ohara, Fujimino, Saitama 356-8502, Japan

Phone: +81-49-278-7829, Facsimile: +81-49-263-9328

E-mail: [info@fiberlabs.co.jp](mailto:info@fiberlabs.co.jp)

URL: <https://www.fiberlabs.com>

## • Preparations before use

This machine is warranted from any failure in normal operation as the machine is fully inspected mechanically and electrically before shipment from the factory. As soon as you receive the cargo, unpack and make certain that the machine is not damaged in transit.

### 1. Included Items

The standard included items are as follows. If any missing items are found upon inspection, contact us immediately.

• Optical amplifier:	1 unit
• Power ON/OFF key:	2 pieces
• Power cord:	1 piece
• Spare fuse:	1 piece (stored in the fuse box of the AC inlet)
• Specifications (by these presents):	1 copy ( or CD)
• Operation Manual:	1 copy ( or CD)
• Programming Manual:	1 copy ( or CD)
• Final Test Inspection Record:	1 copy

We recommend that the carton box and the inner corrugated boards should be kept with care to avoid damage in case of reuse for transfer to another location.

### 2. Acceptance Inspection

#### (1) Mechanical movement check

As to external appearance, movement of the switch, the pump on button, the adjust dial, and connectors, carry out inspection under the condition of being the power supply off to look for possible damage or trouble caused in transit.

#### (2) Operation check

When no trouble is found upon mechanical movement check, carry out operation test to check functions, followed by the instructions of Operation Manual.

#### (3) Upon finding damage or anomalies

If, during acceptance inspection, damage to the machine or anomalies in connection with the specifications are found, contact us immediately with details of the trouble.

• **Standard specifications**

Product No.	AMP-FL8221-SB			AMP-FL8211-SB		
	-19-W	-19	-16	-20	-16	-13
Signal Wavelength	1470~1520nm			1460~1500nm		
Maximum Output Power *1	$\geq +19$ dBm <sup>*1-2</sup>	$\geq +19$ dBm <sup>*1-2</sup>	$\geq +16$ dBm <sup>*1-2</sup>	$\geq +20$ dBm <sup>*1-1</sup>	$\geq +16$ dBm <sup>*1-1</sup>	$\geq +13$ dBm <sup>*1-1</sup>
Gain *2	24 dB typ. <sup>*2-2</sup>	$\geq 30$ dB <sup>*2-2</sup>	$\geq 25$ dB <sup>*2-2</sup>	$\geq 25$ dB <sup>*2-1</sup>	$\geq 20$ dB <sup>*2-1</sup>	$\geq 15$ dB <sup>*2-1</sup>
Gain Flatness *3	$\leq 3$ dB	-		-		
Noise Figure *2	$\leq 7$ dB <sup>*2-2</sup>			$\leq 7$ dB <sup>*2-1</sup>		
Amplifier control	ACC / ALC					
Monitor items	Input power / Output power / Pumping LD current / Pumping LD temperature / Case temperature					
Safety function	Remote interlock					
	Interlock with input Alarm					
Remote control Interface	RS232C / IEEE488.1(GP-IB)					
Input/Output Fibers	Corning SMF28					
Optical Connectors	FC/PC standard					
Size *4	88(H)×260(W)×350(D)mm					
Operation Temperature	0~40 degreeC					
Storage Temperature	-10~60 degreeC					
Power consumption	$< 40$ W		$< 40$ W	$< 20$ W		
Weight	$< 7$ kg					
Power Supply	AC 100-240V(50/60Hz)					
Laser Class (Maximum Output Power)	Class 3B ( $< 200$ mW)		Class 3R ( $< 50$ mW)	Class 3B ( $< 200$ mW)	Class 3R ( $< 50$ mW)	

\*1-1: input power :  $> 0$  dBm @ 1480 nm

\*1-2: input power :  $> 0$  dBm @ 1490 nm

\*2-1: input power : -30 dBm @ 1480 nm

\*2-2: input power : -30 dBm @ 1490 nm

\*3: Gain difference of 1471, 1511nm amplified signals at 1471, 1491, 1511nm signals 0dBm/ch input

\*4: not including protrusions

\* Including Input/Output isolator

• **Options**

Option 012	FC / Angled PC optical connector
Option 013	SC / PC optical connector
Option 014	SC / Angled PC optical connector
Option 093	Reflection from output port interlock (Reflected power monitor)
Option 121	Rack mount kit *

\* Size of the type with “Option 121” is 88(H)×430(W)×350(D) mm.